CLAIMS:

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1. Integrated circuit having a plurality of processing modules (M, S) and an interconnect means (N) for coupling said plurality of processing modules (M, S) and for enabling a device-level communication based on transactions between said plurality of processing modules (M, S), wherein at least one first processing module (M) issues at least one transaction towards at least one second processing module (S) comprising:

at least one transaction abortion unit (TAU) for aborting at least one transaction issued from said first module by receiving an abort request (abt) issued by said first module (M), by initiating a discard of said at least one transaction to be aborted, and by issuing a response (abt_ack) indicating the success/failure of the requested transaction abortion.

2. Integrated circuit according to claim 1, further comprising:

at least one network interface (NI) associated to one of said plurality of
processing modules (M, S), for controlling the communication between said one of said
plurality of processing modules (M, S) and said interconnect (N),

wherein said at least one transaction abortion unit (TAU) is arranged in one of said network interfaces (NI).

- 3. Integrated circuit according to claim 2, wherein
 20 said at least one transaction abortion unit (TAU) is adapted to perform said at
 least one transaction abortion atomically or partially.
- 4. Integrated circuit according to claim 2, wherein said at least one network interface (NI) further comprise a request buffer (REQ) for buffering received data,

wherein said transaction abortion unit (TAU) is adapted to issue a discard for said at least one transaction to be aborted as stored in said request buffer (REQ).

- 5. Integrated circuit according to claim 2 or 4, wherein said at least one network interface (NI) further comprise a response buffer (RESP) for buffering outgoing data,
- wherein said transaction abortion unit (TAU) is adapted to issue a discard for said at least one transaction to be aborted as stored in said response buffer (RESP).
- 6. Integrated circuit according to claim 1, wherein said request for said at least one transaction abortion specifies which transactions are to be aborted, and

 said response (abt_ack) issued by said transaction abortion unit (TAU) specifies which of the requested at least one transaction have been aborted.
- 7. Method for transaction abortion in an integrated circuit having a plurality of processing modules (M, S) and an interconnect means (N) for coupling said plurality of processing modules (M, S) and for enabling a device-level communication based on transactions between said plurality of processing modules (M, S), wherein at least one first processing module (M) issues at least one transaction towards at least one second processing module (S) comprising the step of:
- aborting at least one transaction issued from said first module by receiving an

 abort request (abt) issued by said first module (M), by initiating a discard of said at least one
 transaction to be aborted, and by issuing a response (abt_ack) indicating the success/failure of
 the requested transaction abortion.
- 8. Data processing system, comprising a plurality of processing modules (M, S) and an interconnect means (N) for coupling said plurality of processing modules (M, S) and for enabling a device-level communication based on transactions between said plurality of processing modules (M, S), wherein at least one first processing module (M) issues at least one transaction towards at least one second processing module (S) comprising:
- at least one transaction abortion unit (TAU) for aborting at least one
 transaction issued from said first module by receiving an abort request (abt) issued by said
 first module (M), by initiating a discard of said at least one transaction to be aborted, and by
 issuing a response (abt_ack) indicating the success/failure of the requested transaction
 abortion.